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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,518	07/08/2003	Kiminori Tamai	240077US0DIV	7631

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EXAMINER

MAZUMDAR, SONYA

ART UNIT PAPER NUMBER

1734

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/614,518	Applicant(s) TAMAI ET AL.	
	Examiner Sonya Mazumdar	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003 and 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-12, 14-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-12, 14-21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/859,386.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 provides for a method where a compressed microparticulate-containing layer does not have cracks even when drawn 10%, but, this “drawing” is not recited as a positive step and thus is not clear as to whether it is part of the method of producing a functional film.

Claim 18 provides for a method where a compressed microparticulate-containing layer exhibits a surface resistivity after being drawn 10% which is at most 10 times greater than the surface resistivity prior to drawing, but, this “drawing” is not recited as a positive step and thus is not clear as to whether it is part of the method of producing a functional film.

Claim Rejections - 35 USC § 102

3. Claims 9 through 12, 14 through 21, 23, 24, and 25 are rejected under 35 U.S.C. 102(e) as being unpatentable by Iijima (US 2002/0086138).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a

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showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

With respect to claims 9, 11, 12, 14, 15, 16, 18, 20, 21, 23, and 24, Iijima teaches forming a functional film, such as a conductive layer, where a coating dispersion having functional microparticulates, such as iron oxide and tin-doped indium oxide (ITO), is applied on a support and drying the coating dispersion thereafter. The coating itself does not comprise a resin layer. The coating is compressed by a roll press machine at room temperature (23°C) and transferred to a glass substrate (abstract; paragraphs 0006, 0040, 0041, 0091, 0096, 0107, 0206).

With respect to claims 17 and 25, Iijima teaches using functional microparticulates having an average diameter of 10 µm or less (paragraph 0091).

With respect to claims 10 and 19, Iijima does not specifically teach the peel strength of a functional film before transferring. However, “where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established.” *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977) (MPEP § 2112.01).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

4. Claims 9, 11, 12, 14 through 18, 20, 21, 23, 24, and 25 are rejected under 35 U.S.C. 102(b) as being unpatentable by Oka et al. (US 5976297).

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With respect to claims 9, 11, 12, 14, 15, 16, 18, 20, 21, 23, and 24, Oka et al. teach forming an antireflection film, where a functional coating dispersion, comprising particles such as titanium oxide (TiO₂) or ITO but no resin, is applied to a release film, applying an additional adhesive or ionizing curing resin layer over the coating, and then curing the coating by radiation (abstract; column 2, lines 4-7; column 12, lines 7-8 and lines 24-25; column 54, line 65 – column 55, line 4). The coated release film is then press-bonded onto a resin-coated substrate at 40°C and the release film is removed (column 9, line 52 – column 10, line 5; column 55, lines 19-22; Figures 3 and 4)

With respect to claims 17 and 25, Oka et al. teach providing functional particles in the coating with an average particle diameter of no more than 200 nm (column 12, lines 26-32).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka et al. as applied to claims 9 and 18, respectively, and further in view of Kawachi et al. (US 5096522)

Oka et al. do not teach forming a functional particle layer with the specific peel strength before transferring to another support. Kawachi et al. teach forming a laminate where a functional layer, not comprising a resin, exhibits a peel strength from a carrier, as measured by the 90° peel test, of at least 1.15 kg/cm (column 12, lines 3-9; Table 3).

It would have been obvious for Oka et al. to teach the peel strength of a functional film as Kawachi et al. taught and would have been motivated to do so ensure the coating's adherence to the substrate after transfer from the release liner.

Response to Arguments

7. Applicant's arguments filed May 22, 2006 with respect to the rejection of claims 9 and 18 under 35 USC 112, 2nd paragraph have been fully considered but they are not persuasive. It is acknowledged that the characteristics of the microparticulate layer is stated in the claim, however the "drawing" step is not mentioned and as shown above in

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the rejection of claims 9 and 18 under 35 USC 102(b), there are other methods of transfer that does not include drawing the microparticulate layer. The characteristics can be described in terms of tensile strength, elasticity, etc.

8. Applicant's arguments, see page 10, filed May 22, 2006, with respect to the rejection of claims 10 and 19 under 35 USC 112, 2nd paragraph, have been fully considered and the rejection has been withdrawn.

9. Applicant's arguments with respect to claims 9 through 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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MARK A. OSELE
PRIMARY EXAMINER